

What is claimed is:

- 1 1. A glass panel comprising:
2 a glass substrate;
3 a moisture-sensitive coating disposed on a first surface of the glass substrate, the
4 moisture-sensitive coating having pinholes; and
5 a plurality of thin-film layers disposed on the moisture-sensitive coating, the
6 plurality of thin-film layers sealing the pinholes to protect the moisture-sensitive coating
7 from moisture.
- 1 2. The glass panel of claim 1 wherein the moisture-sensitive coating is a stack
2 of thin-film layers.
- 1 3. The glass panel of claim 2 wherein the stack of thin-film layers includes at
2 least one conductive layer and the stack of thin-film layers has a sheet resistivity less than
3 5 Ohms per square.
- 1 4. The glass panel of claim 1 wherein the plurality of thin-film layers
2 comprises an anti-reflective coating.
- 1 5. The glass panel of claim 1 wherein the plurality of thin-film layers includes
2 an uppermost low-friction layer.
- 1 6. The glass panel of claim 5 wherein the uppermost low-friction layer
2 comprises MgF_2 .
- 1 7. The glass panel of claim 1 wherein the glass substrate comprises tempered
2 glass.
- 1 8. The glass panel of claim 7 wherein the glass substrate is co-tempered with
2 the moisture-sensitive coating.
- 1 9. The glass panel of claim 1 wherein the moisture-sensitive coating is a
2 transparent coating.
- 1 10. A glass panel comprising:
2 a tempered glass substrate;

3 a lowE coating disposed on a first surface of the tempered glass substrate; and
4 a first anti-reflective coating disposed on the lowE coating.

1 11. The glass panel of claim 10 further comprising a second anti-reflective
2 coating disposed on a second surface of the tempered glass substrate.

1 12. The glass panel of claim 10 further comprising an organic light-emitting
2 diode disposed on a second surface of the tempered glass substrate.

1 13. The glass panel of claim 10 wherein the first anti-reflective coating
2 includes an uppermost layer of MgF_2 .

1 14. A glass panel comprising:
2 a glass substrate;
3 a first thin-film stack disposed on a first surface of the glass substrate, the first
4 thin-film stack including pinholes formed by the removal of nodules from the first thin-
5 film stack and at least one conductive layer susceptible to moisture-induced corrosion;
6 a second thin-film stack disposed on the first thin-film stack sealing the pinholes to
7 avoid moisture-induced corrosion of the conductive layer.

1 15. The glass panel of claim 14 wherein the second thin-film stack comprises
2 an index-matching coating.

1 16. The glass panel of claim 15 wherein the index-matching coating is an anti-
2 reflective coating.

1 17. The glass panel of claim 14 wherein the second thin-film stack includes an
2 uppermost layer comprising MgF_2 .

1 18. The glass panel of claim 14 further comprising a polymer film attached to a
2 second surface of the glass substrate.

1 19. The glass panel of claim 18 wherein the polymer film comprises
2 polyethylene terephthalate and is attached to the second surface of the glass substrate with
3 a pressure-sensitive adhesive.

1 20. The glass panel of claim 18 further comprising an anti-reflective coating

2 disposed on a surface of the polymer film.

1 21. The glass panel of claim 14 wherein the glass substrate is tempered.

1 22. The glass panel of claim 14 wherein the first thin-film stack is a lowE
2 coating.

1 23. A glass panel comprising:

2 a glass substrate;

3 a lowE coating disposed on a first surface of the glass substrate;

4 an index-matching thin-film stack disposed on the lowE coating;

5 a sheet of polymer film attached to a second surface of the glass substrate with a
6 pressure-sensitive adhesive.

1 24. The glass panel of claim 23 wherein the polymer film comprises
2 polyethylene terephthalate.

1 25. A method of fabricating a glass panel, the method comprising:

2 providing a glass substrate;

3 depositing a moisture-sensitive coating on the glass substrate;

4 removing nodules from the moisture-sensitive coating to form pinholes in the
5 moisture-sensitive coating; and

6 sealing the pinholes.

1 26. The method of claim 25 wherein the moisture-sensitive coating comprises a
2 thin-film stack.

1 27. The method of claim 26 wherein the thin-film stack is a lowE coating.

1 28. The method of claim 25 wherein the removing step includes a tempering
2 step and a mechanical cleaning step.

1 29. The method of claim 27 wherein the mechanical cleaning step includes a
2 high-pressure washing step and a drying step.

1 30. The method of claim 28 wherein the mechanical cleaning step further
2 includes a brushing step before the drying step.

1 31. The method of claim 26 wherein the removing step includes a tempering
2 step of heating the glass substrate and the thin-film stack to a temperature of at least 650
3 °C in an oxygen-containing atmosphere.

1 32. The method of claim 26 wherein the removing step includes a step of
2 heating the thin-film stack to a temperature sufficient to add compressive stress in the thin-
3 film stack.

1 33. The method of claim 25 wherein the sealing step comprises depositing a
2 second thin-film stack on the moisture-sensitive coating.

1 34. The method of claim 33 wherein the second thin-film stack is an index-
2 matching stack.

1 35. The method of claim 33 wherein the depositing the second thin-film stack
2 includes depositing an MgF_2 layer as an uppermost layer of the second thin-film stack.

1 36. The method of claim 26 wherein the sealing step comprises applying an
2 organic coating on the first thin-film stack.

1 37. The method of claim 34 wherein the organic coating comprises a pressure-
2 sensitive adhesive.

1 38. A method of fabricating a glass panel, the method comprising:
2 providing a glass substrate;
3 depositing a lowE coating on a first side of the glass substrate;
4 simultaneously tempering the glass substrate and the lowE coating in an oxygen-
5 containing atmosphere;
6 mechanically cleaning the lowE coating; and
7 depositing an index-matching thin-film stack on the lowE coating.

1 39. The method of claim 38 further comprising a step of depositing an anti-
2 reflective coating on a second side of the glass substrate.